

In the Claims

Applicant submits a new complete claim set showing marked up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Please cancel claims 2-6, 13 and 17-21, without prejudice to future prosecution.

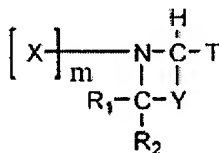
Please amend pending claims 1, 7, 8, 9 and 11 as noted below.

Please re-write the claims as follows:

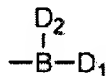
1. **(Currently Amended)** A method for treating a medical disorder in a subject mediated by the alteration of substrate activity comprising administering to the subject an effective amount of a compound having the formula PR, wherein P represents a targeting moiety that binds to DPP-IV, and R represents a reactive group that reacts a reactive center of DPP-IV, said amount being sufficient to prevent chemokine alteration by inhibiting DPP-IV activity, wherein the medical disorder is selected from the group consisting of an intestinal disease, arteriolosclerosis, and insufficient blood clotting.

2.- 6. **(Cancelled)**

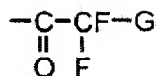
7. **(Currently Amended)** The method of claim 1 wherein the compound has the formula



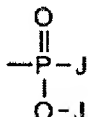
where T is selected from a group of the formula:



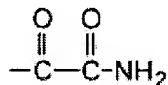
where each D₁ and D₂, independently, is a hydroxyl group or a group which is capable of being hydrolyzed to a hydroxyl group in aqueous solution at physiological pH; a group of the formula:



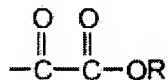
where G is either H, F, or an alkyl group containing 1 to 20 carbon atoms and, optionally, heteroatoms ~~which can be N, S or O~~ selected from the group consisting of N, S and O; a phosphonate group of the formula:



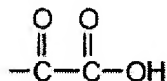
where each J, independently, is any number of C, H, O, S or N atoms in any combination, ~~or O-alkyl, N-alkyl, or alkyl, each O-alkyl, N-alkyl or alkyl containing 1-20 carbon atoms and, optionally, heteroatoms which can be N, S, or O~~; a group of formula



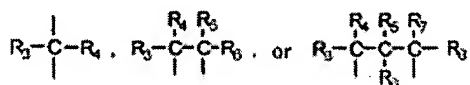
a group of formula



where R is ~~an~~ a substituted or unsubstituted alkyl; or aryl group ~~and may be substituted or unsubstituted~~, or an aliphatic ester; or a group of formula



Y is group of formula:



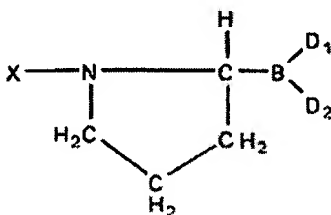
and each R₁, R₂, R₃, R₄, R₅, R₆, R₇, and R₈ are H;

X is any number of C, H, O, S, or N atoms; and

m can vary from 0 to 20.

8. **(Currently Amended)** The method of claim 7 wherein T is a boronate group, a phosphonate group, a ~~cyano group~~, or a trifluoroalkyl ketone group; ~~each R₁ and R₂ is H~~; each Y is CH₂-CH₂; each R is independently chosen from the group consisting of the R group of proline and the R group of alanine; the ~~inhibitory~~ compound has a binding or dissociation constant to DPP-IV of at least 10⁻⁹M; ~~and each D₁ and D₂ is, independently, F, or D₁ and D₂ together are a ring containing 1 to 20 carbon atoms, and, optionally, heteroatoms which can be N, S, or O.~~

9. **(Currently Amended)** The method of claim 7 wherein the compound has the formula



wherein each D₁ and D₂ is a hydroxyl group; wherein X is an amino acid; and wherein C is bonded to B in the L-configuration.

10. **(Original)** The method of claim 9 wherein the compound is Val-boroPro.

11. **(Currently Amended)** The method of claim 9 wherein the compound is cyclic ~~Xaa-boroPro~~ X-boroPro.

12. **(Original)** The method of claim 1 wherein the substrate is selected from the group consisting of SDF-1, RANTES, MIP-1, MIP-3, GLP-2, G-CSF, EPO, IL-6, IL-11, IL-8, Substance P, fibronectin, and monomeric fibrin.

13. **(Cancelled)**

14. **(Original)** The method of claim 1 wherein the compound is given to the subject by oral administration.

15. **(Original)** The method of claim 1 wherein the compound is given to the subject by parenteral administration.

16. **(Original)** The method of claim 1 wherein the effective amount is in the range of 0.01 mg/kg per day to 100 mg/kg per day.

17.-21. **(Cancelled)**

22. **(New)** The method of claim 7, wherein where each J, independently, is O-alkyl, N-alkyl, or alkyl.

23. **(New)** The method of claim 22, wherein each O-alkyl, N-alkyl or alkyl contains 1-20 carbon atoms and, optionally, heteroatoms selected from the group consisting of N, S and O.